

which is furnishing both light and power for that city, these agencies being transmitted over a pole line thirty miles across the mountains. This is one of the largest plants in the West. The plans contemplate the ultimate use of the entire power from the three falls, which will be about sixty thousand horse-power. Middle Fall, now developing twenty thousand horse-power, is supplied with two Victor turbines directly connected to two 725 K. W. generators of the revolving field type; voltage is taken from the generators at 1,000 and stepped up to 20,000 volts, at which it is transmitted over the high tension line to the sub-station in Rossland, where it is stepped down to 2,000 volts for general distribution. Visitors to Slocan Junction will find a few hours spent in examining this great electric plant very interesting indeed.

Boarding a train on the Nelson and Rossland branch of the C. P. R., we follow the west bank of the Kootenay River in its devious windings to its junction with the Columbia River at Robson. This a new town destined to be of much importance, as it is the initial point of the new Robson and Penticton branch of the Canadian Pacific, which will give direct railway connection with the rich mining and agricultural sections of the Boundary and Kettle River districts, and which is now under rapid construction. This line will also complete the link between the Kootenay transportation system and the Penticton and Okanogan system of the C. P. R., which connects with the main line a Sicamous Junction. Robson is also the terminal for the steamers of the company from Arrowhead down to Arrow Lakes, 165 miles.

Crossing the broad Columbia on a comfortable ferry steamer, we board the train again and are soon on our way to Trail. This is a new town of some 2,500 population. In 1894 the site of the town was a part of the wilderness, but now it is a place of bustle and activity. It is located on a flat fronted by the Columbia River and encircled on three other sides by high mountains. Here, perched on a high plateau, is the great smelter now owned and operated by the C. P. R. Company. Its purchase price, and the extensive improvements made by the company, which have just been completed, represent an investment of \$400,000, and the smelter is capable of handling 700 tons of ore daily. The equipment consists of lead sampling works; sampler for treating the copper ores of the Rossland camp; three copper furnaces; two reverberating furnaces for reducing the matte produced by the blasts; one lead furnace; two mechanical roasting furnaces for copper ores; six mechanical roasting furnaces for lead ores; forty-eight large roasting stalls for copper ores; and two hand roasters for either class of ores. In addition, complete refineries are to be built where the lead bullion and copper matte can be converted into virgin gold, silver, lead and copper.

On taking the train for the next stage of our journey, we had the unique experience of riding in what was once the private car of the great Mormon leader, Brigham Young. The car is still furnished in much its original style, and it brought up vivid recollections of the times when every man's hand was raised against the Latter Day Saints, the echoes of which warfare have not yet died. Upon arrival at our destination, we almost expected to meet a large concourse of juveniles with "welcome home" for Dad, while numerous wives of our "bosom" pulled hair as to which should be first to embrace the returning prodigal. But the only voice which greeted us was that of the leather-hinged hackman and hotel runner, which

brought us back to the present with a shock which nearly loosened our front teeth.

We had arrived at the Mecca of the lode miner,

ROSSLAND,

in the centre of the Trail Creek mining district. The distance from Trail to Rossland is seven miles by stage, but it is thirteen by the railway, and part of this is up a railway ladder known as a switchback. The whole distance is a steady climb, Rossland being at an elevation of about eight thousand feet.

The city occupies three flats or benches on a mountain, with higher mountains rising on all sides. The air is dry and pure, and the climate healthful. In July and August the thermometer sometimes mounts to 90 or 100 degrees in the shade; but the nights are always cool, and one sleeps under a blanket the year round. There is usually snow from November to April, and it often attains a depth of five feet. The thermometer rarely goes as low as zero in the winter, though the past winter has been an exception.

The town site was located by Ross Thompson, known as the "Father of Rossland," in 1891, and the first sale of lots took place in 1895. From that time the growth has been rapid, until to-day the town contains about 8,000 people. In 1897 the city was incorporated, since which time \$100,000 has been expended in public improvements. Five miles of streets have been graded, ten miles of sidewalks have been laid, and a sewerage system has been constructed. There is a good system of electric lighting, not only in the city, but extending to the mines in the vicinity, the power being furnished by the plant of the West Kootenay Power and Light Company at Bonnington Falls, already mentioned. A good waterworks system draws the purest water from the mountains, while the telephone system connects all parts of the city and the mines, and through its long distance wires connects with nearly all the cities of the Pacific Coast. The assessed value of real and personal property within the corporate limits is \$1,500,000, while there is an indebtedness of \$100,000 running twenty-five years and drawing interest at five to five and one-half per cent. There are two daily and three weekly newspapers, all very creditable. Among the public buildings may be mentioned the new Provincial court-house, two fine new bank buildings, the Rossland Club's new building, the C. P. R. station, a handsome new school building, and a smaller four-room school. About 500 pupils are enrolled in the public schools, and the leading church denominations are represented. Three chartered banks—the bank of British North America, the Bank of Montreal, and the Merchants Bank of Halifax, with a combined capital of \$27,000,000, furnish ample financial resources. Transportation facilities are supplied by the Canadian Pacific Railway and the Red Mountain Railroad, now a part of the Great Northern Railway system.

But it is the mining industry which overshadows all other interests, and upon which all other interests depend. The mines are exceptionally well located for economical work. Railway sidings can reach nearly all the properties, and, since electric power is now available, it has cut the expense of getting out ore about one-half over the steam-power formerly used. The rock is very hard, a comparatively small amount of timbering is necessary, and little water enters the mines. Thus obviating the use of costly pumping plants. The mines are situated in an area of eruptive rock with a centre core of gabbro, surrounded by uraltite porphyrite. This is traversed by fissures carrying the gold and silver bearing pyrrhotite, chalc-